1-1-2004

Achievement Goal Orientation And Perceived Motivational Climate In Winning Collegiate Softball Programs

Portery Scott
Eastern Illinois University

THESIS REPRODUCTION CERTIFICATE

TO: Graduate Degree Candidates (who have written formal theses)

SUBJECT: Permission to Reproduce Theses

The University Library is receiving a number of request from other institutions asking permission to reproduce dissertations for inclusion in their library holdings. Although no copyright laws are involved, we feel that professional courtesy demands that permission be obtained from the author before we allow these to be copied.

PLEASE SIGN ONE OF THE FOLLOWING STATEMENTS:

Booth Library of Eastern Illinois University has my permission to lend my thesis to a reputable college or university for the purpose of copying it for inclusion in that institution's library or research holdings.

Mary H Smith _____ 8-24-04 _____

Author's Signature Date

I respectfully request Booth Library of Eastern Illinois University **NOT** allow my thesis to be reproduced because:

_____

_____

_____

_____ _____

Author's Signature Date

This form must be submitted in duplicate.

Achievement Goal Orientation and Perceived Motivational Climate

in Winning Collegiate Softball Programs

(TITLE)

BY

Portery Scott

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

Masters of Science

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY
CHARLESTON, ILLINOIS

2004
YEAR

I HEREBY RECOMMEND THAT THIS THESIS BE ACCEPTED AS FULFILLING
THIS PART OF THE GRADUATE DEGREE CITED ABOVE

August 24, 2004
DATE

Phyllis T Crausaz
THESIS DIRECTOR

August 24, 2004
DATE

Phoebe Church
DEPARTMENT/SCHOOL HEAD

Achievement Goal Orientation and Perceived Motivational Climate in Winning Collegiate Softball Programs

Abstract

The study examined the achievement goal orientations and perceived motivational climate of collegiate Division I and III softball programs (n=8). The goal orientations of each athlete (n=130) were measured using the Task and Ego in Sport Questionnaire, TEOSQ (Nicholls & Duda, 1992) and the perceived motivational climate was measured using the Perceived Motivational Climate in Sport Questionnaire, PMCSQ (Walling, Duda & Chi, 1993). The purpose of the study was to investigate the difference in athletes' goal orientation and perceived motivational climate between winning collegiate DI and DIII softball programs. A MANOVA indicated a significant overall main effect difference between divisions ($F(4,125) = 3.075$, $p = 0.19$) in goal orientation and perception of motivational climate.

The between test results indicated ($F(1,128) = 9.947$, $p = .002$) a significant difference only in perceptions of performance climate between divisions. Division I teams had a significantly higher mean (m=3.18) in perception of performance climate than division III (m=2.84). There was no significant difference found in perception of mastery climate, but DI programs were slightly higher in perceived mastery (m=3.74) climate than DIII (m=3.69).

Additionally, there was no significant difference in goal orientation between groups. Athletes in both divisions had high task and low ego-

orientations with DIII having a slightly higher task (m=4.37) orientation than DI (m=4.30) and DI having a slightly higher ego (m=2.65) orientation than DIII (m=2.39). Although the results show a significant difference only in performance climate, both divisions were higher in perceived mastery climate and task orientation than perceived performance climate and ego-orientation. The mean scores were calculated according to the 5-point Likert Scale(1 = strongly disagree - 5 = strongly agree).

The final results indicate that Division I and III winning softball programs differ to a degree in the type of motivational processes present. Although each motivational process was slightly different on each level of competition, collegiate coaches may infer from the present study that winning collegiate athletic programs share similar coaching methods and have similar athletes despite differences in competition level.

Dedication

This thesis is dedicated to all who have helped me academically and athletically throughout my collegiate career, professors, coaches, friends and my family.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

CHAPTER ONE

INTRODUCTION

What components make up a successful collegiate athletic team? Does it have individuals who are motivated by improving on their skills day-to-day/week-to-week or individuals who are motivated by demonstrating superior ability over others? Or does it have individuals that are motivated in a climate where the coach rewards athletes for hard work or where the coach only recognizes superior athletic ability over teammates?

One way researchers have shown the motivational components present in a sports setting is the achievement motivation goal theory developed by Nichols (1984). According to this theory, an athlete goes about achieving a goal or defining success in one of two ways, comparing individual improvement from the most recent task to the last task or by comparing their ability with the ability of others. Nichols (1984) defines these two ways of defining success as task and ego orientation. Nichol's two-factor theory of goal orientation was adapted in the sports realm by Duda (1989) as task & ego involvement. These factors are independent of the other and work to form an individual's goal orientation.

In addition to goal orientations, Nicholls states that the situation at hand plays a role in achievement motivation theory, which has been described as perceived motivation climate. Research has indicated that the athlete's perception of the motivation climate in sports may be a contributing factor in the clarification of individual's goal orientation (Solomon, 1996). The motivational climate, like goal orientations, has two factors, mastery and performance based goals. The mastery climate deals with the recognition of effort and the performance climate deals with the high value of individual ability relative to ability of others.

While goal orientation concerns itself with how an individual goes about achieving a goal, defining success and judging competence, the perceived motivational climate or team

climate in sport is comprised of the quantity, quality and sequence of the interactions that occur among all team members including coaches (Fisher, Mancini, Hirsh, Proulx & Staurowsky, 1978). These interactions create a specific atmosphere, which is responsible for much of the influence exerted on group member's behaviors. The individual in a position of leadership is very often responsible for the climate of the group, and may play a factor in the productivity of the group. Most recent research indicates that the leader of a group has more influence on the team and climate, than an athlete alone, particularly if the athlete's orientation is weak and climate strong.

In many individual studies researchers have used the Task and Ego Orientation in Sport Questionnaire (TEOSQ) developed by Duda and Nicholls (1992) to research goal orientations and the Perceived Motivation Climate in Sport Questionnaire (PMCSQ) developed by Walling, Duda and Chi (1993) to research perceived motivational climate. The TEOSQ has been used to measure goal orientations of people of different cultural backgrounds, sport settings, gender and different levels of competition. The PMCSQ has been used in the workplace, classroom setting, physical education classes and sports setting. This study aims to find the difference of goal orientations and perceived motivational, between different levels of athletic competition and how these motivational process may interact to form the components of a successful athletic team.

Rationale

Research has shown that gender, cultural background, sport, time of season and competitive level all play a significant role in the make up of an individual's goal orientation and perceived motivational climate. The present study aims to focus on the differences of each motivational process on different competitive levels, the relationship of motivational processes on different competitive levels and how they blend to form the make-up of successful collegiate athletic programs.

Is the make-up of a successful team's motivational processes different on different competitive levels? Or are the motivational processes for successful programs similar despite

competitive level? No other study was found that looked at the motivational processes to find the components present in winning athletic programs on different competitive levels.

Research should be continually conducted in the areas of goal orientation and perceived motivational climate and how they interact. This will help determine the best combination of motivational processes that will produce successful outcomes among athletic programs.

Setting up a particular type of motivational climate and finding a particular type of individual to fit with that climate is believed to be important in getting optimal performance (Seifriz, Duda & Chi, 1992). Because this has been found, it may be in the best interest of the coach to set up an environment that fits an athlete's behaviors or for a coach to choose athletes that will fit the coach's environment. Those in coaching positions may benefit from this type of study because the findings will reveal the motivational processes that are present in programs with winning athletic traditions.

The present study investigates the difference in motivational climate, achievement goal orientations, and the interaction of the two between collegiate Division I and III softball programs. There may be a significant difference in motivational processes between the divisions because the higher the level of competition the higher value is placed in establishing superiority over other individuals. For example, DI athletes have outside factors that include athletic scholarships, ability level, nature of competition (size of crowd), media coverage and more pressure on the coach to win. In comparison, DIII athletes do not receive athletic scholarships, talent level is lower, fan base is lower and less importance is placed on ability level.

Purpose

The first purpose of this study was to investigate the difference in goal orientation between Divisions I and III collegiate softball players.

The second purpose of this study was to investigate the difference in athletes' perceived motivational climate between Divisions I and III collegiate softball players.

A third purpose of this study was to investigate how perceived motivational climate

interacts with goal orientations in Division I and III winning collegiate softball programs.

Hypothesis

It was hypothesized that Division I softball players would have goal orientations higher in both task and ego-orientation than Division III softball players.

It was hypothesized that Division I softball players perceive their motivational climate as higher in mastery and performance than Division III softball players.

It was hypothesized that Division I softball players perceive motivational climate as high in mastery and performance in conjunction with goal orientation high in both task and ego.

It was hypothesized that Division III softball players perceive motivational climate as high in mastery climate in conjunction with goal orientation high in task.

Delimitations

Subjects of the study are Division I and III collegiate softball players from schools in Illinois, Indiana, Missouri and Wisconsin (Division I-Western Illinois University, Illinois State University, Ball State University and Southwest Missouri State University & Division III-Eureka College, Lawrence University, Knox College and University of Wisconsin- Oskosh). Each program was chosen based on geographic location, size of school, level of competition, gender of coach and winning percentages.

Women coaches head all teams to reduce possible differences in coaching behaviors that may exist between the sexes. All coaches have three or more years of coaching experience with average career records above .500 at their respective schools. Three or more years of coaching experience establishes some type of consistency in coaching behavior and an average career record above .500 establishes a winning percentage that reflects that the program has been

successful over a three year or more years period. Each program was chosen from the Midwest due to geographic variables that reflect differences in coaching styles, competitive level or climate factors that may affect each motivational process.

Definitions

Task Involvement: Undifferentiated conception of ability to judge demonstrated competence,conceives ability as improvement, and is concerned with learning or mastery of the task (Duda, 1989).

Ego Involvement: The differentiated conception of ability to judge demonstrated competence, perceives ability as capacity and is concerned with outperforming others and demonstrating superior ability to others (Duda, 1989)

Task Orientation: Individual difference in the tendency to be task involved (Nicholls, 1984).

Ego Orientation: Individual difference in the tendency to be ego involved (Nicholls, 1984).

Motivational Climate: Situational goal structure (Kavussanu & Roberts, 1996).

Mastery Climate: Task involving achievement situations (Kavussanu & Roberts, 1996).

Performance Climate: Ego involving achievement situations (Kavussanu & Roberts, 1996).

Intrinsic Motivation: Engage in an activity in the absence of extrinsic rewards or constraints (Kavussanu & Roberts, 1996).

Self-Efficacy: Situation-specific form of self-confidence (McAuley, 1992).

Adaptive Response: Positive cognitive responses, such as the feeling of competence or success in achievement situation (Vlachopoulos & Biddle, 1997).

Maladaptive Response: Negative cognitive responses such as the feeling of anxiety or failure in an achievement situation (Vlachopuolos & Biddle, 1999).

Division I: Member institutions have to sponsor at least seven sports for men and seven for women (or six for men and eight for women) with two team sports for each gender. Must meet minimum financial aid awards for their athletics programs, and there are maximum financial aid awards for each sport that a Division I school cannot exceed (NCAA, 2003).

Division III: Member institutions have to sponsor at least five sports for men and five for women, with two team sports for each gender, and each playing season represented by each gender. Features student-athletes who receive no financial aid related to their athletic ability. Places emphasis on regional in-season and conference competition (NCAA, 2003).

CHAPTER TWO

REVIEW OF LITERATURE

Understanding what motivates an individual to achieve a goal has been one of the most popular research topics in the psychology world. Research has focused on two motivational processes, goal orientation and perceived motivational climate in the classroom, physical education, office and sports settings. Studies were conducted to find differences in each motivational process according to gender, age, cultural background, competitive level and sport. This study will focus on the motivational process components present between winning athletic programs on different levels of collegiate competition.

Achievement goal orientations

According to Nichols (1984), achievement goal theory assumes that the primary goal of individuals in achievement contexts is the demonstration of competence and ability. This is an individual's goal orientation and the demonstration of competence and ability will define how they view success.

Nichols states that two conceptions of ability exist and that these are projected through two goal states of involvement that operate in the achievement context, task and ego orientation. Individuals are assumed to hold one of these or both conceptions of ability. Task involvement implies task mastery or personal improvement as reflecting high competence and subjective success. Thus, perception of competence tends to be self-referenced if the individual is task-oriented. Ego-involvement implies individuals judging their own competence by comparison to others. In these individuals, high ability and perceived goal accomplishment result in the displaying of superiority over those to whom they compare themselves and these individuals are

ego-oriented. For example, if a softball player is task-oriented, she will demonstrate task-involvement by having the best performance she has ever had in an at bat situation. But if, she is ego-oriented, she will demonstrate ego-involvement by working to outperform others in an at bat situation. According to Nichols (1984) the two independent factors of goal orientation are present in all athletes and the degree to which each factor exhibits itself is the athlete's goal orientation.

Competitive Level

It is believed that athletes participating at different competitive levels differ in goal orientations. In reviewing literature no studies were found comparing goal orientation of winning programs on different competitive levels. But there is literature that compares goal orientations on different competitive levels. Carpenter and Yates (1997) found that amateur soccer players were significantly higher in task-involvement than semi-professional soccer players. Scores for ego-involvement were higher for semiprofessionals but not significantly different. White and Zellner (1996) looked at male and female athletes participating in a variety of sports at three competitive levels, intercollegiate, high school and college recreational sports. They found that high school athletes were significantly more ego-involved than the intercollegiate athletes and that the college recreational athletes were the highest in task-involvement. Rysk & Yin (1999) conducted a study also comparing the goal orientations of competitive levels (recreational and competitive league soccer athletes) and no significant differences were found. Finally, in a study conducted by White & Duda (1994) comparing goal orientations of gender and competitive levels, the highest competitive level group was found to be significantly more ego-oriented than the lower competitive level.

Gender

Research has also indicated that gender plays a role in an athlete's goal orientation. In a study by Duda (1989) using varsity high school athletes involved in individual and team sports, a

significant difference was found between the goal orientation of female and male students. The results showed a significantly higher score for females on task-involvement and a significantly higher ego-involvement score for males. Duda and Hom (1993) found no significant gender-related differences in goal orientation for athletes and their parents involved in summer basketball camp. Duda, Chi, Newton, Walling & Catley (1995) looked at members of a college tennis class and found significant differences in scores related to task-involvement with females scoring significantly higher in task-involvement than males. No significant differences were found related to ego-involvement. The literature has shown inconsistencies with orientations between genders, but more often males score higher in ego-involvement than females.

Goal Profiles

According to Nicholls (1989), one can be task-orientated, ego-orientated or both. Nichols' goal perspective theory assumes that the two goal orientations are independent. Literature suggest that a larger percentage of elite athletes are high in both task and ego orientation rather than low in both or higher in one and lower in the other, and that it is more likely that the two goal orientations will be positively correlated at higher competitive levels.

Because the dimensions of task and ego orientations have repeatedly been found to be independent in the sport setting, researchers have argued for the utility of goal profiles for examining potential effects of goal orientations (Duda, 2001). In the formulation of goal profiles, participants in a sample are usually divided by a median or mean split on the task and ego orientation scales and then four classifications are formed: participant who are high task and high ego, those who are high task and low ego, those who are high ego and low task and those who are low task and low ego (Duda, 1988). More research needs to be conducted to determine goal orientation differences in competitive level and gender.

Adaptive vs. Maladaptive Responses

Contemporary goal perspective theories suggest that behavioral variation in achievement

context is a function of the interplay between goals and perceptions of ability. Research indicates that goal orientations affect adaptive motivational behaviors (e.g., intrinsic motivation, attributions, athletic performance) (Li, Harmer, Chi & Vongjaturapat, 1996).

It is believed that an individual is likely to engage in adaptive patterns of behavior such as choosing moderately challenging tasks, focusing upon effort within the context, trying hard in the face of difficulty or failure, being interested in the tasks and persisting in the tasks over time. The same pattern of adaptive achievement behavior is also assumed for goal-oriented people when perceptions of ability are high (Duda, 1989; Dweck, 1986). Also an adaptive achievement pattern will be observed among individuals who are ego-involved as long as their perceived abilities are high, or among those who are task-involved regardless of their levels of competence. Ego-oriented individuals with low levels of perceived ability, however, are assumed to exhibit negative, non-adaptive achievement-related behaviors (Seifriz, Duda & Chi, 1992).

Goal perspective theories of achievement motivation predict that task involvement fosters intrinsic motivation. In contrast, an ego-involving perspective is assumed to lead to reductions in intrinsic interest (Nicholls, 1989). It is argued that experiencing intrinsic rewards may be more difficult for people who are ego involved because the focus is on obtaining normatively successful outcomes. Such a focus reduces the possibility that a person will perceive himself to be competent and in control (Seifriz, Duda & Chi, 1992).

A considerable amount of evidence has emerged relative to the cognitive and affective correlates of task and ego goals. In addition goal profile assessment has shown that a high task orientation, either alone or in combination with a high ego orientation, has been linked to high levels of enjoyment in children who did not think highly of their sport ability compared to children high in ego orientation or low in both orientations (Fox, Goudas, Biddle, Duda & Armstrong, 1994).

Task orientation has been associated with greater enjoyment and persistence in sport. It has been hypothesized that task orientation would positively relate to personally controllable attributions independent of success perceptions for either perceived ability group. That is, such

an orientation is more likely to lead to adaptive cognitive responses even after a perceived failure on the task at hand. In a study (Vlachopoulos & Biddle, 1997) examining if task and goal orientations can determine the experience of feelings of success, engagement in personally controllable attributions and enhanced positive emotion regardless of any moderating effects of perceived ability, the investigators found task orientation positively associated with success perception, and this association was not influenced by differential levels of perceived ability. And under the high perceived ability condition, ego orientation was positively associated with personally controllable attribution, whereas the relationship was inverse for the low perceived ability students engaged in personally uncontrollable attributions because of the belief that ability is difficult to change and there is little space for improvement.

Scholars in the field have argued for the adaptive repercussions of being high in task and ego orientation (Duda, 2001). Duda used the goal profile approach in a study investigating persistence and behavioral intensity among recreation sport athletes (Duda, 1988), and it became apparent that people who have both orientations exhibit high motivation. Duda (1997) then suggested that what may make high task/high ego individuals motivated over the long haul is the fact that they have their strong task orientation to fall back on when their sense of normative competence is in jeopardy.

More specially, Nichols work (1989) suggests that a mastery perspective will more often lead to the exhibiting of maximal effort, enhance the development of perceived ability and lead to positive achievement behaviors. Nicholls argues that maladaptive task choices and performance impairment are not found in task involvement. In ego-involvement, individuals with low perceived ability choose unrealistically easy or difficult tasks, tasks that provide little opportunity for development of competence. According to Nicholls' theory only when an ego-involved individual has high-perceived ability will he or she tend to perform well and to choose intermediately difficult tasks.

TEOSQ

The major measure of dispositional goal orientations in sport literature is the Task and Ego Orientation in Sport Questionnaire (TESOQ), developed Duda and Nicholls (1989). Many studies have supported the validity and reliability of this instrument. (Duda & Whitehead, 1998). Consistent with the thinking of Nicholls (1989), this questionnaire uses variation in the proneness to task and ego involvement in sport by assessing individuals' achievement related concerns or criteria underlying subjective success (Duda, 2001).

Within the theoretical framework of achievement goal orientation, Duda and Nicholls (1992) developed the TEOSQ to assess individual differences in proneness for task or ego goal orientation in athletic settings. Psychometric tests on TEOSQ have shown some construct validity as well as internal consistency reliability in research involving a variety of samples, including youth sport, high school students, and college age sport participants and non-participants in North America (Duda & Nichols, 1992).

Even more, an additional contribution of Nicholls (1989) concerning orientations is the proposition that task and ego orientations are orthogonal, not bipolar. This independence has been supported in research using the TEOSQ in sport and physical education settings (Duda & Whitehead, 1998).

One current dilemma is the potential inappropriate use of the TEOSQ as measures of goal states or task and ego involvement. The questionnaires were developed to assess how individuals define success in sport with respect to self-reference (trying hard, learning) and normative reference (showing that one has more ability than others). In contrast to the situation with independent dispositional tendencies, it is believed to be difficult to believe that an individual can be in a state of task and ego involvement at the same time, although this individual may experience various degrees of task and ego involvement in the same activity. These two goal states, according to Nicholls (1989) entail different ways of processing an activity that can fluctuate during an event (Duda, 2001).

The TEOSQ does not measure personality traits but rather dispositional tendencies that are relatively stable, but not fixed over time (Duda, 2001). Theory suggests that dispositional goal orientations are malleable and are impacted by situational factors. For instance Ames (1992b) indicates that a task-involving climate in the classroom setting promotes a task orientation whereas an ego-involving atmosphere encourages the development of ego orientation.

Motivational climate

While one aspect of research is related to achievement goal orientations in sport and has shown that individual differences in goal orientation are associated with different motivational processes of each individual, the other aspect of research focuses on situational influences or motivational climate. Motivational climate is the atmosphere that a leader creates as a result of his behaviors (Stringer & Litwin, 1968).

Similarly, while individuals can be task or ego oriented, environments can be also task (mastery climate) or ego orientated (performance climate). Ames and her colleagues have used the term motivational climate to refer to the situational goal structure and have adopted terms mastery and performance to refer to task and ego involving achievement situations (Dweck & Legett, 1988).

Motivational climate is the function of the goals to be achieved, the evaluation and rewarding process, and how individuals are expected to relate to each other in a particular setting. In a study by Ames and Archer (1988), they investigated the relationship of perceived motivational climate on motivational processes in high school classrooms. Student perceptions of classroom goal structure were assessed in relation to task choice, attitude about school and attributions for success and failure. Students who perceived mastery-orientated structure operating in their classrooms were more likely to use effective learning strategies, opt for challenging tasks, have a positive attitude toward their classes and perceive effort as the primary reason for success. Students perceiving a performance-oriented structure tended to make ability

attributions for performance and to perceive their levels of ability to be low when experiencing failure.

Competitive Level

Duda suggested (1992) that the performance outcome dimension of the sport setting becomes increasingly important at higher competitive levels. Ryska & Yin (1999) conducted a study comparing the goal orientations and perceptions of motivational climate of youth competitive and recreational league soccer athletes. The perceptions of climate by the players in a lower competitive league were more mastery-involved than higher competitive league youth soccer players. The youth competitive league perceived more of a performance climate.

Adaptive vs. Maladaptive Responses

Similar to goal orientations, the type of motivational climate an individual is placed in can also have a maladaptive or adaptive affect on the individual's performance. In a study with adolescent athletes competing in an amateur international competition Walling, Duda & Chi (1993) examined the relationship between perceptions of the motivational climate and the degree of worry experienced while participating and team satisfaction. The study was consistent with achievement goal theory in that perceptions of mastery-oriented climate were positively related to satisfaction with being a member on the team and negatively associated with performance worry. In contrast, perceptions of performance climate were positively associated with concerns about failing and adequacy of one's performance and negatively related with team satisfaction. The literature suggests that the promotion of task-involving motivational climate is related to greater team satisfaction (Walling, Duda, & Chi, 1993).

A goal perspective approach suggests that for predominantly task-orientated athletes, regardless of their level of perceived competence, adaptive motivational responses will result when in a mastery climate (Nicholls, 1989). That is for individuals who base their success on self-reference criteria, participation in environments which emphasize effort and skill

improvement will foster positive reactions and behaviors. Positive responses are also expected for highly task-oriented athlete's participating in climates which emphasize performance (Newton & Duda, 1998). But as pointed out by Treasure and Roberts (1994) this prediction may not be substantiated in cases where the motivational climate is strongly performance involving. No study has reported a positive relationship between the perception of an ego-involving climate and an adaptive motivational pattern (Papaionnou & Kouli, 1999).

Intrinsic Motivation & Self-efficacy

In the physical activity domain, self-efficacy, a situation specific form of self-confidence has importance (Bandura,1986). Both intrinsic motivation and self-efficacy are desirable outcomes in a physical activity contest (Kavussanu & Roberts, 1996).

The motivational climate is assumed to have an impact on intrinsic motivation of individuals who engage in achievement contexts. Individuals are said to be intrinsically motivated when they engage in an activity in the absence of extrinsic rewards or constraints (Kavussanu & Roberts, 1996). A task-involving goal perspective has been both conceptually and empirically linked to intrinsic motivation, whereas an ego-involving perspective has been inversely associated with intrinsic interest (Duda, Chi, Newton, Walling, & Catley, 1995). In other words, ego involvement by its defining features is incompatible with intrinsic motivation (Kavussanu & Roberts, 1996).

Additionally, motivational climate was a significant predictor of self-efficacy, and dispositions did not contribute to self-efficacy prediction. As a result, the type of motivational climate induced by the coach is important in determining how it will impact the athlete's cognitive response or self confidence. A study conducted by Goudas (1998) examined the relationship between motivational climates and intrinsic motivation. Goudas hypothesized that for athletes high in perceived competence, perceptions of a motivational climate high in mastery and performance would be positively related to intrinsic motivation. It was previously reported in a study by Seifriz (1992) that there was a non-significant relationship between a performance-

oriented climate and high levels of intrinsic motivation. Goudas (1998) hypothesized that for athletes of low competence, perceptions of a motivational climate that were high in mastery-orientation would enhance intrinsic motivation. Gouda's hypothesis was not fully supported. The results found that athletes with different perceptions of perceived competence did not differ on intrinsic motivation. Results also indicated that perceived competence did not interact with perceived high mastery climates.

PMCSQ

In order to test perceptions of motivational climate the Perceived Motivational Climate in Sport Questionnaire (PMCSQ) was developed by Walling Duda & Chi (1993). Relevant to the sport domain is assessments of the perceived situational emphasized goal structure that is stressed by coaches and parents. Exploratory and confirmatory factor analysis has supported the factorial validity of PMCSQ, studies have indicated that the task and ego climate dimensions of the questionnaire are internally reliable and posses concurrent validity (Duda & Whitehead, 1998). The PMSQ has not been found to be orthogonal or bipolar (Duda, 2001).

Achievement Goal Orientation & Motivational Climate

Research from an achievement goal perspective has examined how the structure of the environment referred to as the motivational climate (Ames, 1992a) can make it more or less likely that achievement behaviors associated with a particular state of involvement are adopted. In other words motivation climate can affect achievement goal orientations. Achievement goal theory suggests that the predominant goal perspective held by the individual in a given achievement context is a function of the interplay between dispositional and situational factors (Nicholls, 1989). Individuals approach an achievement context with the predisposition to be task or ego involved or both (Kavussanu & Roberts, 1996). Dweck and Legett (1988) have stated, "dispositions are seen as individual difference variables that determine the probability of

adopting a particular goal and displaying a particular behavior pattern and situational factors are seen as potentially altering these probabilities."

Early research on the matching or person-environment fit hypothesis (Pervin, 1968), in relation to the interaction of achievement orientations and motivational climate, suggest that if each individual's environment matches the characteristics of one's personality, there will be higher performance, greater satisfaction and lower anxiety. In comparison, the person-fit hypothesis states that a lack of fit is expected to result in performance impairment, dissatisfaction and stress.

The person-environment fit perspective suggests that, for each individual, there are environments that more or less match the characteristics of her/his personality. According to (Pervin, 1968), strongly task-oriented athletes, regardless of level of perceived ability, should respond more positively in a situation that matches their disposition. Highly ego-oriented athletes with either high or low perceived competence are proposed to exhibit an adaptive pattern in an ego-involving climate.

According to more recent research, strongly task-oriented athletes regardless of level of perceived ability should respond more positively in situations that match their disposition. In a study (Newton & Duda, 1998) involving female volleyball players there was no evidence supporting the person-environment fit hypothesis. They investigated the hypothesis that best results in terms of predicting intrinsic motivation and expectations of success would occur in situations in which the motivational climate was matched with the goal orientation. But the person-environment fit hypothesis was supported by work of researchers (Duda, 1993; Dweck & Leggett, 1988; Teasure & Roberts, 1994) who have suggested that strong motivational climates may override the influence of disposition on one's motivational perceptions and beliefs, particularly when one's orientation is not very strong.

Ntounanis & Biddle (1998) conducted a study examining the relationships of achievement goal orientations and perceived motivational climate. The subjects were university athletes. Some "matching" was indicated in this study with high perceptions of mastery climate

found in conjunction with high perceptions of task orientation, and moderate to high perceptions of performance climate found in conjunction with moderate to high perceptions of ego-orientations. Ntoumanis and Biddle (1998) studied the interdependencies between the perceived motivational climate and dispositional goals in a cross sectional design via structural equation modeling. Among British university athletes, results showed that a perceived task-involving climate was associated with an task-orientation. The researchers' interpretation was that athletes prefer to belong to teams with compatible views on the nature and means of achievement, supporting the matching hypothesis.

Commenting on the possible interaction of these two dimensions of motivation, Dweck and Leggett (1988) suggest that in an achievement context in which the situational cues favoring either a task or ego goal are vague or weak, an individual's goal orientation should be more predictive than the situation criteria. If, on the other hand, the cues are strong in favor of either a performance or mastery climate, dispositions should be less predictive, and greater homogeneity among responses of individuals within that context will result. The stronger the disposition, the less likely the situational cues are predictive or the situational cue necessary to influence the disposition will be stronger. Alternatively, the weaker the disposition, the easier it can be altered by situational cues. Dweck and Legett (1988) contended that one should expect individuals to behave inconsistently across situations, when the strength of the cues varies across these settings.

A fundamental tenet of achievement goal theory is that dispositional goal orientations and perceptions of motivational climate are two independent dimensions of motivation affecting behavior in achievement context (Nicholls, 1989). Ames (1992) suggested that long-term exposure to a mastery climate should promote task orientation, while a performance climate will encourage the development of ego orientation.

This study aims to conduct further research in the investigation of goal orientation profiles, perceptions of motivational climate, the possible interaction of these two motivational processes and how they blend to form the make-up of winning athletic programs on different competitive levels. Both are two dimensions of motivation that can affect behavior (Nicholls,

1998). Research to date however, has primarily dealt with disposition goal orientations and perceptions of motivational climate in isolation (Treasure & Roberts, 1998).

The methodological challenge of testing possible interactions between goal orientations and perceptions of climate is that reasonably large samples of athletes are required (Duda, 2001). Contemporary goal theorists are short on specifics of when, how and how much orientations and the perceived climate might interact. Dweck and Leggett (1988) suggest situational characteristics, such as the degree to which the environment is task and ego involving, can alter the probability of adopting a goal of action. The orthogonality of goal orientation complicates such probabilities (Duda, 2001).

CHAPTER THREE

METHODS

The purpose of this study was to investigate the difference of athletes' goal orientations and perceived motivational climate between winning softball collegiate divisions I and III programs. A second purpose was to investigate a relationship that may exist between goal orientation and perceived motivational climate in winning collegiate softball divisions I and III programs.

Subjects

Eight winning collegiate women softball programs participated in the present study, four division I mid-majors and four division III programs. A total of 130 collegiate female athletes participated. The schools selected and willing to participate included Division I, Illinois State University (n=22), Western Illinois University (n=17), Ball State University (n=16) and Southwest Missouri State (n=16); Division III Eureka College (n=17), Knox College (n=17), University of Wisconsin Oskosh (n=16), and Lawrence University (n=9).

Subject selection criteria first included an in season sport, to factor in the possibility of doing research on motivational process during pre-season or post season will not reflect the best results as peak performance outcomes occur in season. A second selection criteria included, programs headed by female coaches, to limit any possible differences in coaching behaviors between the sexes. A third selection criteria included, each coach having coached at their respective schools for at least three years, with a school career record above .500. Three years of coaching experience may establish coaching behaviors. A fourth selection criteria included a school career record of above .500 to establishes a winning program or tradition. A fifth selection criteria included, having only women athletes to eliminate differences in perceptions of

motivational climate and goal orientation that exist between the sexes. Finally each program was selected based on geographic location to take into consideration the coaching behaviors, level of competition and overall cultural makeup of the Midwest, which could result in additional cultural variables.

Instrumentation

The instruments used in this study were the Task and Ego-Orientation in Sport Questionnaire (TEOSQ) and the Perceived Motivational Climate in Sport Questionnaire (PMCSQ). The TEOSQ (Appendix A) questionnaire measures goal orientations of individuals. Nicholls and Duda (1992) developed the TEOSQ. This instrumentation has been used in Greek physical education and has shown to be reliable and valid. Athletes respond to thirteen questions, noting when they feel most successful in sport. Each question is scale rated from 5 (Strongly Agree) to 1 (Strongly Disagree). The questions are divided into a subscale of seven task-orientation questions and six ego-orientation questions. The Perceived Motivational Climate in Sport Questionnaire (Appendix B) was constructed in order to investigate the subject's perceptions of motivational mastery and performance climates. This questionnaire has a Mastery (9-item) and a Performance (12-item) subscale. Responses are rated on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Examples of mastery climate items include, players try to learn a new skill and trying hard is rewarded, while performance climate items include, only the top players get noticed, and players are taken out for mistakes. Seifriz, Duda and Chi (1992) and Walling, Duda and Chi (1993) have demonstrated the validity of the PMCSQ.

Procedures

The teams selected for this study were identified through the schools' athletics Internet homepage to confirm the coaching tenure of at least three years at respective schools and a career record above .500 at their current schools. Initially 10 schools were selected from each division and 8 coaches responded.

The head coach of each team was contacted through a letter by e-mail and via postal mail (Appendix C) and by phone explaining the purpose of the study. A phone call was made to each school to ensure receipt of letter, to confirm participation and to explain any further details of the study. Four Division I and four Division III schools agreed to participate.

Once participation was confirmed a packet consisting of a letter(Appendix D) thanking the coach for participation, explaining the purpose of the study and instructions on how to administer the questionnaires was sent to the coach. The coaches were asked to have someone other than themselves administer the 13-item TEOSQ and the 21-item PMCSQ, which also included five demographic questions, year in school, position, scholarship status and amount of playing time. A letter to the athlete (Appendix E) was also included explaining the purpose of the study and directions needed to complete both questionnaires. The packet also included a self-addressed stamped envelope (SASE) for the questionnaires to be sent back after completion. Each SASE was color coded on the inside to match the packet in correlation with each individual school.

Data Analysis

Each athlete's score for task-orientation was determined by adding the responses for items 2, 5, 7, 8, 10 , 12, and 13 on the TEOSQ and then dividing by seven to obtain an adjusted mean score based on a Likert scale of 1=strongly disagree and 5= strongly agree. Similarly, an ego-orientation score was determined using items 1, 3, 4, 6, 9, and 11 on the TEOSQ. Items 2, 4, 5, 10, 13, 15, 16, 17 and 19 on the PMCSQ were used to determined a mean adjusted mastery-climate score for each athlete. PMCSQ item 1, 3, 6, 7, 8, 9, 11, 12, 14, 18, 20 and 21 were used

to calculate the mean adjusted performance-climate score for each subject. Means and standard deviations for task and ego-orientation and for master and performance-climate were then calculated for each Division (I and III)

A multivariate analysis of variance (MANOVA) was performed, using SPSS Version 10.0, with the subscales of mastery-climate, performance-climate, task-orientation and ego-orientation as dependent variables. The first hypothesis would be supported if DI softball players scored higher in task and ego-orientations than DIII softball players. The second hypothesis would be supported if DI softball players scored higher on perceptions of a mastery and performance-climate than Division III softball players. The third and fourth hypotheses would be supported if DI and DIII softball players' perceived motivational climate were positively related to their goal orientations.

CHAPTER FOUR

RESULTS

The purpose of this study was to determine the motivational processes present in winning softball programs and to investigate a possible interaction and difference between collegiate athletic competitive levels. The study used the Task and Ego in Sport Questionnaire (TEOSQ) and the Perceived Motivation in Sport Climate Questionnaire (PMCSQ) to assess the make-up of successful teams at different competitive levels.

Demographics of the Subjects

Year in school, scholarship status and playing time were included on the PMCSQ and TEOSQ questionnaires.

Year in School (Question 1)

As shown in Table 1, the proportions by class year were similar for both divisions, with the exception of a slightly higher percentage of freshmen in Division 1 and slightly higher percentage of sophomores in Division III programs.

Table 1. Year in School Shown by Division

Division	1st	2nd	3rd	4th
I	31%	22%	28%	18%
II	25%	29%	27%	19%

Scholarship Status (Question 3)

Many Division I softball players received a partial athletic scholarships (37%) or full athletic scholarships (22.9%) In comparison most Division III softball players received a combination of academic and financial aid (42.9%), financial aid (27.1%) or academic scholarships (22%) (Table 2).

Table 2. Scholarship Status by Division

Division	Full Athletic	Partial Athletic	Academic	Financial Aid	Athletic & Financial Aid	Athletic & Academic	Academic & Financial Aid	Walk-on	Other
I	22.9%	37.0%	2.4%	13.4%	12.0%	8.7%	NA	1.4%	2.2%
III	NA	NA	22.0%	27.1%	NA	NA	42.9%	NA	8%

Amount of Playing Time (Question 4)

Table 3 shows Division I softball players in the present study received a significant amount of playing time (57.7%). The majority of Division III softball players in the present study also received a significant amount of playing time (61%). Overall 95.7% of the participating athletes received playing time on the DI level compared to 4.3% who did not. On the DIII level, 96.6% of the athletes received playing time compared to 3.4% who did not.

Table 3. Amount of Playing Time

Division	Significant	Some	Little	None
I	57.7%	16.9%	21.1%	4.3 %
III	61.0%	23.7%	11.9%	3.4%

Hypothesis Test

There were four hypotheses tested in this study. The first stated that Division I softball players' goal orientation would be higher in both task-orientation and ego-orientation than Division III softball players. The second stated that Division I softball players' perceptions of motivational climate would be more mastery-involved and performance-involved than Division III softball player perceptions. The third hypothesis stated that Division I softball players' perceptions of climate would be high in both mastery-involving and performance-involving in conjunction with goal orientations high in task-orientations and ego-orientations. The fourth suggested that Division III softball players' perceptions of climate would be more of a mastery involving than performance involving in conjunction with goal orientations as more task involving than ego-involving. The means and standard deviations and adjusted means for the perceptions of motivational climate and goal orientations are shown in Table 4. A comparison between divisions of the adjusted means (Madj) is shown in Figure 1 for goal orientations and in Figure 2 for motivational climate.

Table 4. Means, Standard Deviations and Adjusted Mean Scores

	Motivational Climate						Goal Orientation					
Division	M	SD	Madj	M	SD	Madj	M	SD	Madj	M	SD	Madj
	Mastery			Performance			Task			Ego		
I	33.8	4.3	3.74	38.2	7.6	3.18	30.1	7.1	4.30	15.9	5.1	2.65
III	33.2	4.8	3.69	34.1	7.0	2.84	30.6	7.6	4.37	14.3	4.7	2.39

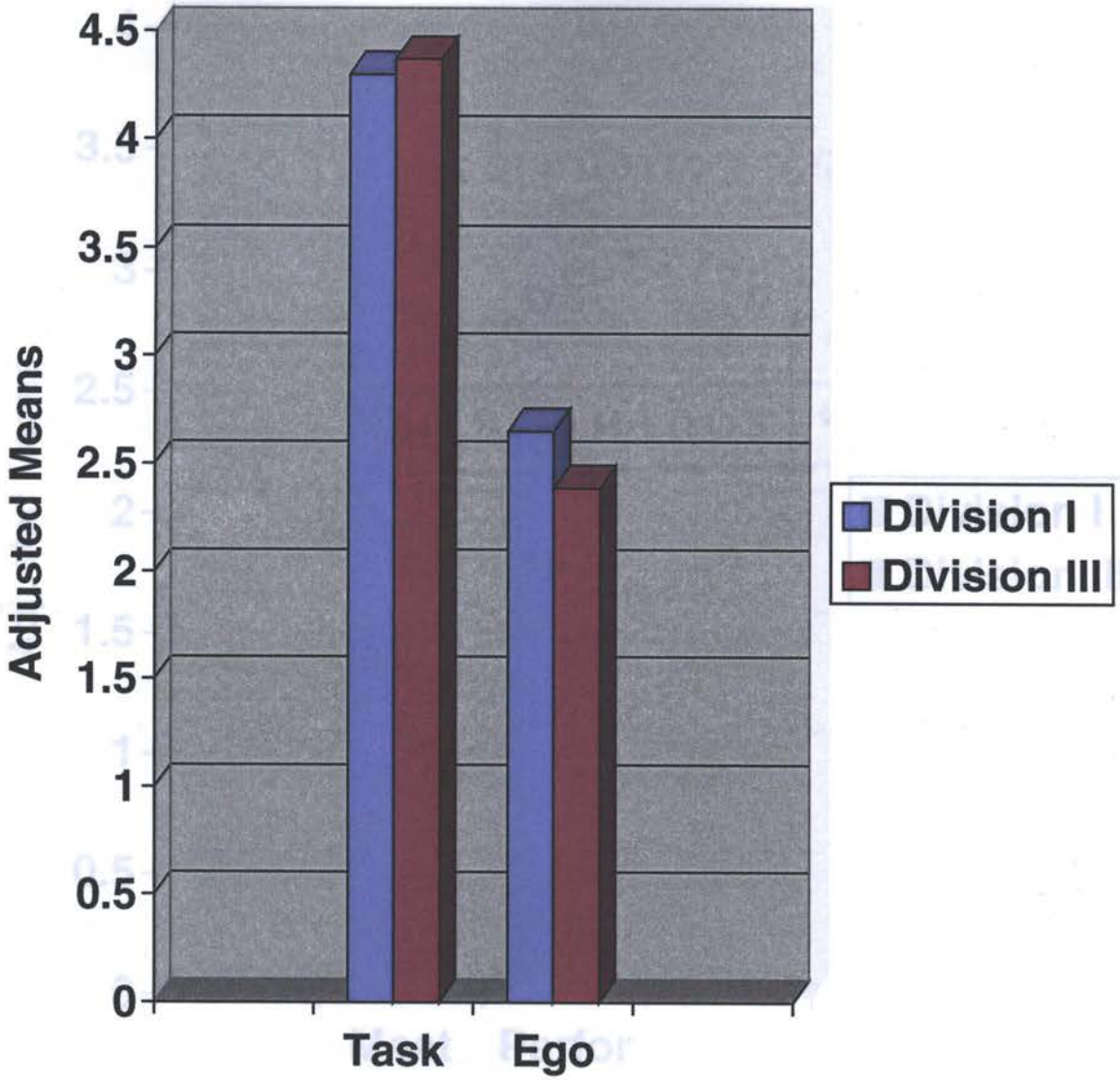

Figure 1. Division comparison of Task and Ego Orientation

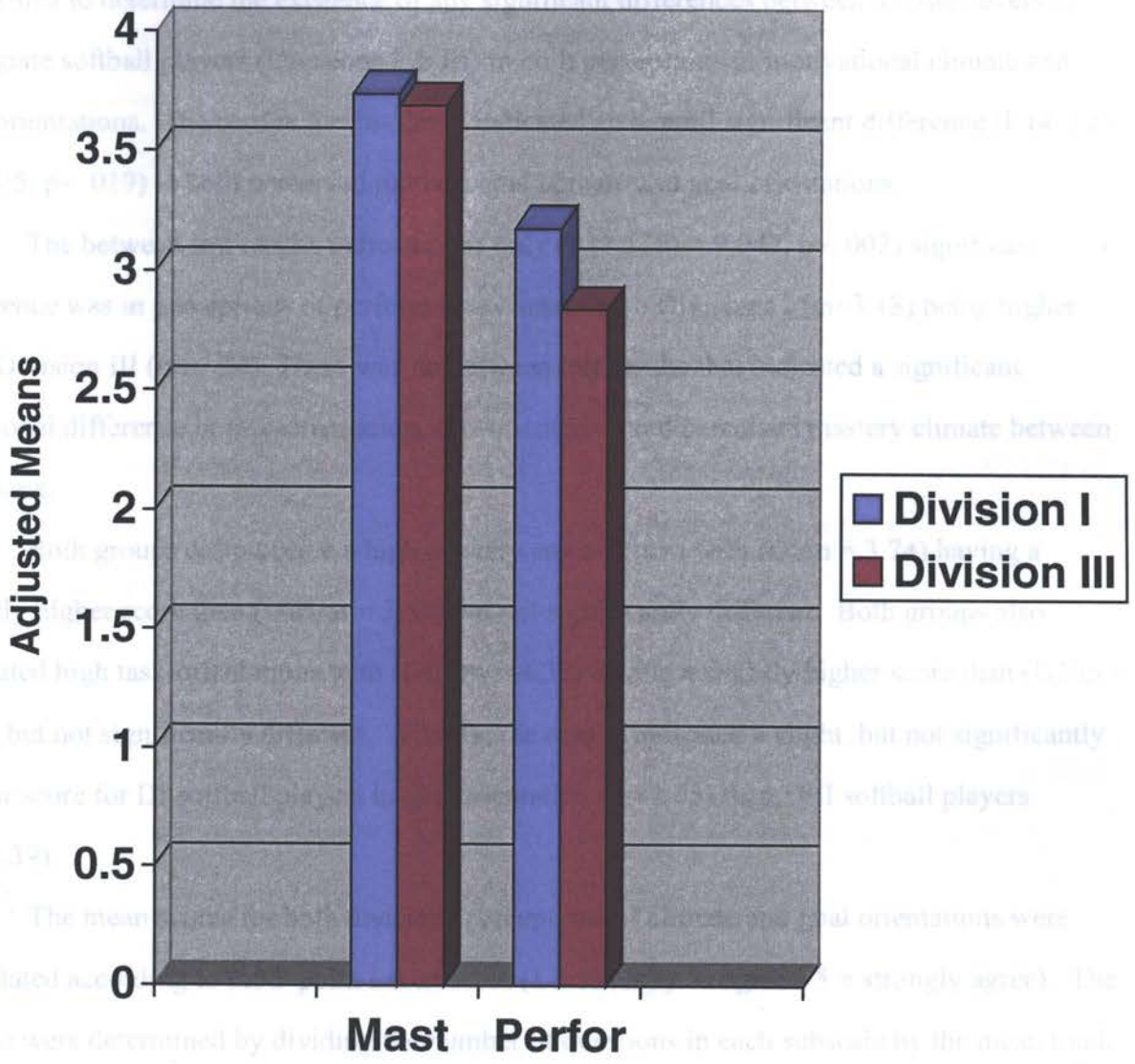

Figure 2. Division comparison of Mastery and Performance Climate

In order to test each hypothesis a multivariate analysis of variance (MANOVA) was performed to determine the existence of any significant differences between the two levels of collegiate softball players (Divisions I & III) in both perceptions of motivational climate and goal orientations. The results for this study indicated an overall significant difference (F (4, 125) = 3.075, p=. 019) in both perceived motivational climate and goal orientations.

The between test results indicated the only (F (1,128) = 9.947, p=. 002) significant difference was in perceptions of performance climate with Divisions I (m=3.18) being higher than Division III (m=2.84). There was no between test results that indicated a significant divisional difference in task-orientation, ego-orientation and perceived mastery climate between divisions.

Both groups did perceive a high mastery environment with (DI/m = 3.74) having a slightly higher score than (DIII/m = 3.69) but not significantly different. Both groups also indicated high task-orientations with (DIII/m = 4.37) having a slightly higher score than (D1/m = 4.30) but not significantly different. Finally, the results indicated a slight, but not significantly higher score for DI softball players in ego-orientation (m=2.65) than DIII softball players (m=2.39).

The mean scores for both divisions perceptions of climate and goal orientations were calculated according to the 5-point Likert scale (1 = strongly disagree - 5 = strongly agree). The means were determined by dividing the number of questions in each subscale by the mean total. Newton and Duda (1998) stated that the best combination of goal orientation and motivational climate is to be both task and ego oriented in conjunction with a mastery climate. This was not reflected in the present sample as players in both divisions had high task-orientation (4.3 and 4.4) but lower ego-orientation (2.7 and 2.4). Additionally, DI was higher in both a perceived Mastery (3.74) climate and perceived performance (3.18) climate.

Discussion

Goal orientation is the set of personal goals that relate to beliefs about success and failure. An athlete's perception of motivational climate is the degree to which an athlete perceives the climate of her sport to be mastery or performance involving. It was the purpose of this study to investigate goal orientation and perceptions of motivational climate of winning collegiate softball programs between Division I and III competitive levels in the Midwest. After assessing the motivational differences individually and how they interact, the study looked to find the components present in successful athletic programs.

The between test results indicated the only significant difference to be in perceptions of performance climate. Division I teams measured a significantly higher mean (m = 3.18) in perceptions of performance climate than Division III (m = 2.84). To my knowledge there have been no previous studies investigating motivational processes of winning athletic programs at different competitive levels.

The results of the study partially supported the first hypothesis in that Division I softball players were slightly more ego-orientated than Division I softball players but a statistically significant difference was not found. White & Duda (1994) comparing goal orientations of gender and competitive levels found the highest competitive level (intercollegiate) group to be significantly more ego-oriented than lower competitive groups (youth sports, high school sports & recreational sports). In contrast, Ryska & Yin (1999) found task and ego orientations not being a significant contributing factor in differentiating recreational and competitive league soccer athletes.

The second hypothesis was partially supported in that DI softball players perceptions of motivational climate were more mastery-involved and performance-involved than Division III. There was no significant difference found in mastery-involvement, but a significant difference was found in a performance-involving climate between the divisions. These findings were partially consistent with research that found at higher competitive levels the perceptions of a

more performance-involved climate are higher than at lower competitive levels. For example Duda (1992) suggested that the performance outcome dimension of the sport setting becomes increasingly important at higher competitive levels. But the present study findings were not consistent with the findings in a study conducted by Ryska & Yin (1999) comparing the goal orientations and perceptions of motivational climate among youth competitive and recreational league soccer athletes. They found recreational soccer players' perceptions of climate to be more mastery-involved than the competitive league soccer players' perceptions whereas in the present study, players at both levels perceived a high mastery climate.

The third hypothesis was not supported in that DI softball player's perceptions of motivational climate were not high in mastery and performance in conjunction with goal orientations high in task and ego. But the findings did indicate a higher mastery climate and higher task orientation and lower performance and ego in DI. This suggests some matching hypothesis in the present study. In a study by Ntoumanis & Biddle (1998) examining the relationships of achievement goal orientations and perceived motivational climate the results indicated a link between the two motivational processes. The university athletes in this study had high perceptions of mastery climate and task orientation and moderate to high perceptions of performance climate and ego-orientation.

The fourth hypothesis was supported in that DIII softball players' perceptions of a high mastery climate match with high task orientations. Also found were perceptions of a lower performance climate in conjunction with lower ego orientations in both divisions.

According to Nicholls (1989), whether individuals will be in a state of task or ego involvement will depend on both the influence of situational variables and individuals' dispositional differences on goal perspectives. It was hypothesized by Nicholls (1989) that goal orientations can be altered over time because they are subjected to influences of different psychological climates and developmental changes.

The "person-fit hypothesis" has not been verified in all studies conducted to examine a possible relationship between motivational processes. In a study by Newton & Duda (1999)

examining the interaction of motivational climate and goal orientations of junior female volleyball players the matching theory was not supported. The results indicated that highly task-oriented female volleyball players were able to maintain their belief in the utility of effort independent of the level of task involvement perceived to be induced in the climate. In contrast low task-oriented players in highly mastery involved climates tend to believe more strongly that trying one's best contributed to success in volleyball.

Overall, the present sample of both divisions had perceptions of a higher mastery-involved climate than performance and both divisions indicated more task-orientation than ego-orientation. Previous research has shown that females tend to be more task-oriented than males, and males to be more competitive in nature (White & Duda, 1994). Also, these findings are consistent in that perceptions of a more mastery-involved climate is more beneficial in trying to get optimal results in athletes. This suggests that although the different competitive levels differed to a degree in each motivational process, the motivational processes present in winning softball programs of both divisions are similar with task-orientation and perceived mastery climate prevalent over ego-orientation and perceived performance climate on both levels of competition.

Theory suggests that the competitive sport environment that fosters a mastery-involved climate permits athletes to experience a positive adaptive process of motivational development (Ames, 1992a). This environment may be developed through the strategic approach of coaches, parents, and sport psychologists. Most authorities would agree that regardless of competitive level, attempts should be made to create mastery-involved team climates so that athletes can respond positively to task challenges (Duda, 1992). In a study conducted by Papaioannou & Kouli (1999) examining the effects of task structure, perceived motivational climate and goal orientations in the physical education lesson, perceptions of a mastery-involved climate and task-orientations were positive predictors of concentration and less anxiety in junior high school students.

CHAPTER FIVE

SUMMARY AND CONCLUSION

The purpose of this study was to investigate the difference in goal orientation and perception of motivational climate of players in winning collegiate softball Division I and III softball programs. A second purpose was to examine the relationship between goal orientation and perceived motivational climate between each division.

The study found that DI softball players perceived a significantly higher performance climate but no difference in mastery climate from Division III softball players. The motivational climate at the DI programs was perceived as high in both mastery (M=3.74) and performance (M= 3.18), while the climate in the Division III programs was high in mastery (m = 3.69) and lower in performance (M = 2.84). There was no significant difference found in goal orientations, but players in both divisions were high in task and low in ego-orientation.

The results of this study support findings by Ntoumanis & Biddle (1998) who have demonstrated some matching or a relationship between perceptions of motivational climate and goal orientations. In the present study both DI and DIII programs reported perceptions of a high mastery-involving climate in conjunction with high task-orientations. Additionally, perceptions of a weaker performance-involving climate in conjunction with weaker ego-orientations were found.

The present study showed that perceptions of a mastery climate may be linked with task orientations, whereas perceptions of a performance climate may be related to ego goal orientations. These results can help coaches and parents in determining the psychological environment they attempt to create in sport. That is, if they want to have task-

oriented individuals they should provide motivational cues or exhibit motivational behaviors that individuals will perceive as mastery-related. Other studies (Newton & Duda, 1993; Walling, 1993) have consistently reported a positive relationship between positive affects and task orientation or mastery climate. Ego orientations and performance climate have been found to have negative effect depending on perceived ability level. Coaches can analyze achievement goal orientations and motivational climate of their team to determine how to emphasize a mastery climate, task goals and when it is appropriate to use competitive or self-comparison goals. The results of this study indicated that both levels of winning teams promoted more of a mastery climate and were higher in task-orientation.

Future Studies

The findings of this study indicate that the relationship of an athlete's goal orientation and perception of motivational climate needs further study. Does the athlete enter the sport with a specific goal orientation and to what degree does the motivational climate of the sport assist in forming the athlete's goal orientation?

It is suggested that longitudinal research needs to be conducted to examine the interaction of motivational climate and goal orientations. Even more, research should be conducted examining the differences of perceptions of climate and goal orientations across different sports, winning vs. non-winning traditions, individual sports vs. team sports, pre-season vs. in season vs. post season.

Overall, this research gives evidence that there are some similar traits present on winning collegiate athletic programs despite differences in competitive level and what previous studies have found. The final results indicate that Division I and III winning softball programs differ to a degree in the type of motivational processes present and although each motivational process was slightly different on each level of competition, collegiate coaches may infer from the present

study that winning collegiate athletic programs share similar coaching methods and have similar athletes despite differences in competition level.

REFERENCES

Ames, C. (1992a). Achievement goals, motivational climate, and motivational processes. In Roberts, G. C. (Eds.) Motivation in Sport and Exercise (pp.161-176). Champaign, Illinois: Human Kinetics.

Ames, C. (1992b). Classrooms: Goals, structures, and student motivation. Journal of Educational Psychology, 84, 261-271.

Ames, C. & Archer, J. (1988). Achievement goals in the classroom: Students' learning strategies and motivation processes. Journal of Educational Psychology, 80, 260-267.

Bandura, A (1982). Self-efficacy mechanism in human agency. American Psychologist, 37, 22-147.

Biddle, (1995). Exercise and psychosocial health. Research Quarterly for Exercise & Sport, 66, 292-297.

Carpenter, P.J. & Yates, B. (1997). Relationship between achievement goals and the perceived purposes of soccer for semiprofessional and amateur players. Journal of Sport and Exercise Psychology, 19, 302-311.

Duda, J.L. (2001). Achievement goal research in sport: Pushing some boundaries and clarifying some misunderstandings. In G.C. Roberts (Ed.), Advances in motivation in sport and exercise. Champaign, IL: Human Kinetics.

Duda, J. L., (1989). Goal perspectives, participation and persistence in sport. International Journal of Psychology, 20, 42-56.

Duda, J.L., (1989). Relationship between task and ego orientation and the perceived purpose of sport among high school athletes. Journal of Sport and Exercise Psychology, 11, 318-335.

Duda, J.L. (1988). The relationship between goal perspectives and persistence and intensity among recreational sport participants. Leisure Sciences, 10, 95-106.

Duda, J. L., Chi, L., Newton, M. L., Walling, M. D., & Catley, D., (1995). Task and ego orientation and intrinsic motivation in sport. International Journal of Sport Psychology, 26, 40-63.

Duda, J. L., & Hom, H. L., (1993). Interdependencies between the perceived and self-reported goal orientations of young athletes and their parents. Pediatric Exercise Science, 5, 234-241.

Duda, J. L., & Nicholls, J. G., (1992). Dimensions of achievement motivation in schoolwork and sport. Journal of Educational Psychology, 3, 290-299.

Duda J.L., & Whitehead, J. (1998) Measurement of goal perspectives in the physical eduction domain.. In J. Duda (Ed.) Advances in sport and exercise psychology measures. Morgantown, WV: FIT Press.

Dweck, C.S. (1986). Motivational processes affecting learning. American Psychologist, 41, 1040-1048.

Dweck, C.S., Leggett, E.L. (1988). A social-cognitive approach to motivation in school work and sport. Psychological Review, 95, 256-273.

Fisher, C.A., Mancini, V.A., Hirsch, R.L., Proulx, T.J., Staurowsy, E.J. (1978). Coach-athlete interactions and team climate. Journal of Sport Psychology 4,387-403

Fox, K., Goudas, M., Biddle, S., Duda, J. L., & Armstrong, N., (1994). Children's task and ego profiles in sport. British Journal of Educational Psychology, 64, 253-261.

Goudas, M, (1998). Motivational climate and intrinsic motivation of young basketball players. Perceptions and Motor Skills, 86, 323-327

Kavussanu, M., & Roberts, G. C. (1996). Motivation and physical activity contexts: the relationship of perceived motivational climate to intrinsic motivation and self-efficacy. Journal of Sport and Exercise Psychology, 18, 264-280

Li, F., Harmer, P., Chi, L., & Vongjaturapat, N., (1996). Cross-cultural validation of the task and ego orientation in sport questionnaire. Journal of Sport and Exercise Psychology, 18, 392-407.

McAuley, E. (1992). Understanding exercise behavior: A self-efficacy perspective. In GC. Roberts (Ed.), Motivation in sport and exercise (pp. 107-128). Champaign, IL: Human Kinetics.

Moos, R.H. (1976). The human context: Environmental determinants of behavior. New York: Wiley.

National Collegiate Athletic Association (2003). What's the difference between Divisions I, II and III? [On-line].

Newton, M.L., J.L., Duda. (1998). The interaction of motivational climate, dispositional goal orientation and perceived ability in predicting indicies of motivation. International Journal of Sport Psychology, 29, 1-20

Nicholls, J.G. (1989). The competitive ethos and democratic educator. Cambridge, MA: Harvard University Press

Nicholls, J. (1984). Conceptions of ability and achievement motivation. In R. Ames & C. Ames (Eds.), Research in motivation in education: Student motivation. Vol. 1 (pp. 39-73). New York: Academic Press.

Ntoumanis, N., & Biddle, S. (1998). The relationship between competitve anxiety, achievement goals and motivational climates. Research Quarterly for Exercise and Sport, 69 (2) 176-187.

Papaioannou, A. (1992). Students' motivation in physical education classes which are perceived to have different goal perspective. Unpublished doctoral dissertation. University of Manchester, England.

Papaioannou, A. Kouli, O. (1999). The effects of task structure, perceived motivational climate and goal orientations on students' task involvement and anxiety. Journal of Applied Sport Psychology, 11 51-71.

Pervin, L.A. (1968). Performance and satisfaction as functions of individual-environment fit. Psychological Bulletin, 69, 56-68.

Ryska, T.A., Yin, Z. (1999). Dispositional and situational goal orientations as discriminators among recreational and competitive league athletes. Journal of Social Psychology, 139, 335-342.

Seifriz, J. J., Duda, J.L., Chi, L. (1992). The relationship of perceived motivational climate to intrinsic motivation and beliefs about success in basketball. Journal of Sport Psychology,14, 375-391.

Stringer, R.A., Litwin G.H. (1968). Motivation and organizational climate. Boston: Division of Research, Graduate School of Business Administration.

Solomon, M.A. (1996). Impact of motivation climate of students' behaviors and perceptions in a physical education setting. Journal of Education Psychology, 88, 731-738

Treasure, D.C., Roberts, G.C. (1998). Relatationship between adolescent females' achievement goal orientations, perceptions of the motivational climate, beliefs about success and sources of satisfaction in basketball. International Journal of Sport Psychology, 29, 211-230.

Treasure, D.C., Roberts, G.C. (1995). AchievementgGoals, motivational climate and achievement strategies and behaviours in Sport. International Journal of Sport Psychology. 26, 64-80.

Treasure, D.C., & Roberts, G.C. (1994). Cognitive and affective concomitants of task and ego goal orientations during the middle school years. Journal of Sport and Exercise Psychology, 16, 15-28.

Vlachopoulos & Biddle (1999). Modeling the relation of goal orientations to achievement-related affect in physical education: Does perceived ability matter? Journal of Sport Exercise and Psychology, 19, 169-187.

Walling, M. D., Duda, J. L., & Chi, L., (1993). The perceived motivational climate in sport questionnaire: construct and predicative validity. Journal of Sport and Exercise Psychology15, 172-183.

White, S. A., & Duda, J. L., (1994). The relationship of gender, level of sport involvement and participation motivation to task and ego orientation. International Journal of Sport Psychology, 25, 4-18.

White, S. A. & Duda, J. L. (1994). The relationship of gender, level of sport involvement, and participation motivation to task and ego orientation. International Journal of Sport Psychology, 25, 4-18.

White & Zellner (1996). Relationship between goal orientation, beliefs about causes of sport success and trait anxiety among high school, intercollegiate and recreational sport participants. The Sport Psychologists, 11, 58-7.

APPENDIX A - TASK AND EGO IN SPORT QUESTIONNAIRE

Task and Ego Orientation in Sport Questionnaire (TEOSQ)

This questionnaire is designed to assess your perception of your achievement behavior. There are no right or wrong answers, so please answer honestly. Your responses will be kept confidential.

Directions: Please read each of the statements listed below and indicate how much you personally agree with each statement by circling the appropriate response.

When do you feel most successful in sport? In other words, when do you feel a sport activity has gone really well for you?

I feel most successful in sport when ...

NOTE: Likert Scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree

	SD	D	N	A	SA
1. I'm the only one who can do the play or skill.	1	2	3	4	5
2. I learn a new skill and it makes me want to practice more.	1	2	3	4	5
3. I can do better than my friends.	1	2	3	4	5
4. The others can't do as well as me.	1	2	3	4	5
5. I learn something that is fun to do.	1	2	3	4	5
6. Others mess up and I don't.	1	2	3	4	5
7. I learn a new skill by trying hard.	1	2	3	4	5
8. I work really hard.	1	2	3	4	5
9. I score the most points/goals/hits, etc.	1	2	3	4	5
10. Something I learn makes me want to go and practice more.	1	2	3	4	5
11. I'm the best.	1	2	3	4	5
12. A skill I learn really feels right.	1	2	3	4	5
13. I do my very best.	1	2	3	4	5

Demographic Information

1. Year in School 1 2 3 4 5
2. Position played _____
3. Scholarship Status (please circle all that apply)
   1. Athletic (full)
   2. Athletic (partial)
   3. Academic
   4. Financial aid (grants, loans, student work)
5. Other (please specify) _____
4. Amount of Playing Time (please circle) 1. Significant 2. Some 3. Little 4. None

APPENDIX B – PERCEIVED MOTIVATONAL CLIMATE IN SPORT QUESTIONNAIRE

Perceived Motivational Climate in Sport Questionnaire (PMCSQ)

This questionnaire is designed to assess your perception of your team's motivational climate. The Following questions ask how you perceive your involvement in this sport throughout the season. There are no right or wrong answers, so please answer honestly. Your responses will be kept confidential.

Directions: Please read each of the statements listed below and indicate how much you personally agree with each statement by circling the appropriate response.

On this Team ...

NOTE: Likert Scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree

	SD	D	N	A	SA
1. Players feel good when they do better than their teammates	1	2	3	4	5
2. Trying hard is rewarded.	1	2	3	4	5
3. Players are punished when they make a mistake.	1	2	3	4	5
4. Coaches make sure players improve on skills they are not good at.	1	2	3	4	5
5. The focus is to improve each game.	1	2	3	4	5
6. Players are taken out of the game for mistakes.	1	2	3	4	5
7. Playing better than teammates is important.	1	2	3	4	5
8. Coaches give most of their attention to the stars.	1	2	3	4	5
9. Doing better than others is important.	1	2	3	4	5
10. Players work hard because they want to learn more about the activities.	1	2	3	4	5
11. Coaches favor some players more than others.	1	2	3	4	5
12. Players are encouraged to outplay their teammates	1	2	3	4	5
13. Players are encouraged to work on their weaknesses.	1	2	3	4	5
14. Everyone wants to be the high scorer	1	2	3	4	5
15. Everyone feels that they have an important role on the team.	1	2	3	4	5
16. Coaches want us to try new skills.	1	2	3	4	5
17. Players like playing when teams are evenly matched.	1	2	3	4	5
18. Only the top players get noticed by the coaches.	1	2	3	4	5
19. Most of the players get to play in the game.	1	2	3	4	5
20. Players are afraid to make mistakes.	1	2	3	4	5
21. Only a few players can be the stars.	1	2	3	4	5

APPENDIX C – LETTER OF PARTICIPATION TO COACHES

March 2002

Dear Coach,

I am currently a graduate student at Eastern Illinois University and I am working on completing the thesis requirement for a Master's degree in Athletic Administration under my thesis chairperson Dr. Phyllis Croisant.

I am writing to ask for your participation in completing a study investigating perceived achievement behavior and perceived motivational climate of winning collegiate softball programs. The study will investigate the difference of athletes' perceive achievement behavior and their perceptions of motivational climate of winning divisional levels I and III. This study will try to provide support that scholarship status determines an athletes' perception of their own achievement behavior and perceptions of motivational climate.

This study will require the athletes' completion of two 15-question questionnaires along with several demographic questions. An approximate time for completion of both questionnaires is 10 minutes.

At this time I am asking for your participation in this study. A response can be either made by phone or e-mail. I know you are currently in season, but I hope you can take a few minutes of your time in helping complete this study. Your participation in this study will be greatly appreciated.

Sincerely

Portery Scott
(217) 581-2031
porterys@hotmail.com

Phyllis Croisant
Department of Physical Education
Eastern Illinois University
Charleston, IL 61920
(217) 581-7596

APPENDIX D – LETTER OF INSTRUCTIONS TO COACHES

April 2002

Dear Coach,

Thanks so much for your participation in this study. Once again the purpose of this study is to investigate players' perceptions of their own achievement behaviors and their perceptions of motivational climate. I believe there may be a difference in athletes' achievement behavior and motivational climate between Division I and Division III programs.

I have enclosed a 2-page packet for each of your athletes. It includes a letter explaining the study along with a 13-item questionnaire and 21-item questionnaire. The questionnaires will take less than 10 minutes to complete. Please have someone other than yourself (perhaps an athlete or athletic trainer) hand out and collect the surveys and seal them in the self-addressed return envelope. Your assistance in this study is greatly appreciated. I will send you a summary of the results when the study is complete. Best wishes for the remainder of your season.

Sincerely,

Portery A. Scott
3 University Apartments
Charleston, IL 61920

Dr. Phyllis Croisant (thesis advisor)
Department of Physical Education
Eastern Illinois University
Charleston, IL 61920
Phone: (217) 581-7596

APPENDIX E – LETTER OF INSTRUCTIONS TO ATHLETES

April 2002

Dear Athlete,

This study is designed to assess your perceptions of your individual achievement behavior in athletics as well as the motivational climate created by your head coach. I am planning to make comparisons between athlete sin Division I and III teams. I would be very grateful if you could take just a few minutes to complete this short questionnaire. Your participation, however, is voluntary. If you don't wish to answer these questions just return the questionnaire to the person administering it. Don't sign your name anywhere. Your responses will be completely anonymous. When you are finished, just return the questionnaire to person who gave it to you. Be sure you have filled out both sides.

Thanks again for your help with my research.

Sincerely,

Portery A. Scott
3 University Apartments
Charleston, IL 61920

Dr. Phyllis Croisant
Department of Physical Education
Eastern Illinois University
Charleston, IL 61920
(217) 581-7596